



# GRAIN TRANSPORTATION REPORT

Transportation & Marketing, Agricultural Marketing Service  
United States Department of Agriculture

DECEMBER 3, 2002

<u>TM GRAIN TRANSPORT COST INDICATORS</u>	<u>Truck</u>	<u>Rail</u>	<u>Barge</u>	<u>Ocean</u>	
				<u>Gulf</u>	<u>PNW</u>
Indicator Value* for 12/3	95	157	120	111	121
Compared to Last Week	➡	⬆	⬇	⬆	⬆
* Indicator: Base Year 2000=100; Cost Data. Weekly Updates include Truck=Diesel, Rail=Nearby Secondary Rail Market; Barge=Spot Illinois River Basis; Quarterly Updates for Ocean Vessel based on Routes to Japan					

**West Coast Ports Dispute Tentatively Settled.** Following a protracted dispute and lengthy negotiations, the International Longshoremen Warehouse Union (ILWU) and the Pacific Maritime Association (PMA) reached a tentative agreement Sunday, November 24, 2002 that is likely to bring peace and stability to West Coast ports. "This landmark agreement is a victory for longshore workers and their families, and a win-win for business, labor and our national economy," according to James Spinosa, the ILWU International President.

Among the provisions of the new contract, the parties agreed to technology improvements, leading to increased efficiency and cost savings and improved safety. The six-year contract will also improve health care benefits to workers and their families and increased wages. Besides the obvious benefits to the ILWU, settlement of the contract dispute will also benefit shippers of manufactured goods as well as agricultural shippers. Feed grains are among the top container exports for the United States, as well as being a major gateway for other U.S. agricultural exports.

The disruption in the region continues to have a significant impact on ocean transportation capacity, availability, pricing and service. Shippers are, reportedly, experiencing difficulty in gaining access to empty containers for export, and there is a shortage of truck chassis for moving twenty-foot containers. Also, shippers in certain ports continue to experience significant wait times for moving cargo in or out of port. Given the current progress, operational delays and difficulties are likely to continue into 2003.

The new agreement is scheduled to be ratified during a during a membership vote when the Longshore Caucus, a representative assembly of delegates, meets during the week of December 9-13, in San Francisco, CA. (*American Journal of Transportation* 12/5, *U.S. Department of Agriculture*, *Baltimore Sun* 11/29)

**Panama Canals Transit Time Reduced.** The Panama Canal Authority (ACP) recently announced a reduction of 16.6 percent for the time a vessel spends in Canal waters until it completes its transit through the waterway. The average Canal Waters Time (CWT) for 2001-2002 was 26.2 hours, compared to an average CWT of 31.4 hours for 1999-2000, a 5.2 hour average time savings for a vessels trip through the Canal.

The reduction was even more dramatic for shippers using the Canal's "reservation system," where ships are able to reserve an exact date to transit the Canal. Ships using this system took only 18.6 hours to transit the Canal.

The ACP attributed the reduction partly to its permanent modernization program, which has recently widened the Gaillard Cut, increased the Canal's locomotive fleet from 80 to 100, and acquired more powerful and maneuverable tugs.

The Canal is importance to the U.S. grain trade is evident, since approximately 36 million long tons of grain moved from west to east, while roughly 2.7 million long tons moved from east to west during 2001. (*Panama Canal Authority*, [www.pancanal.com](http://www.pancanal.com) 11/21, *USDA*)

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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

**Market Update: U.S. Origins to Export Position Price Spreads**

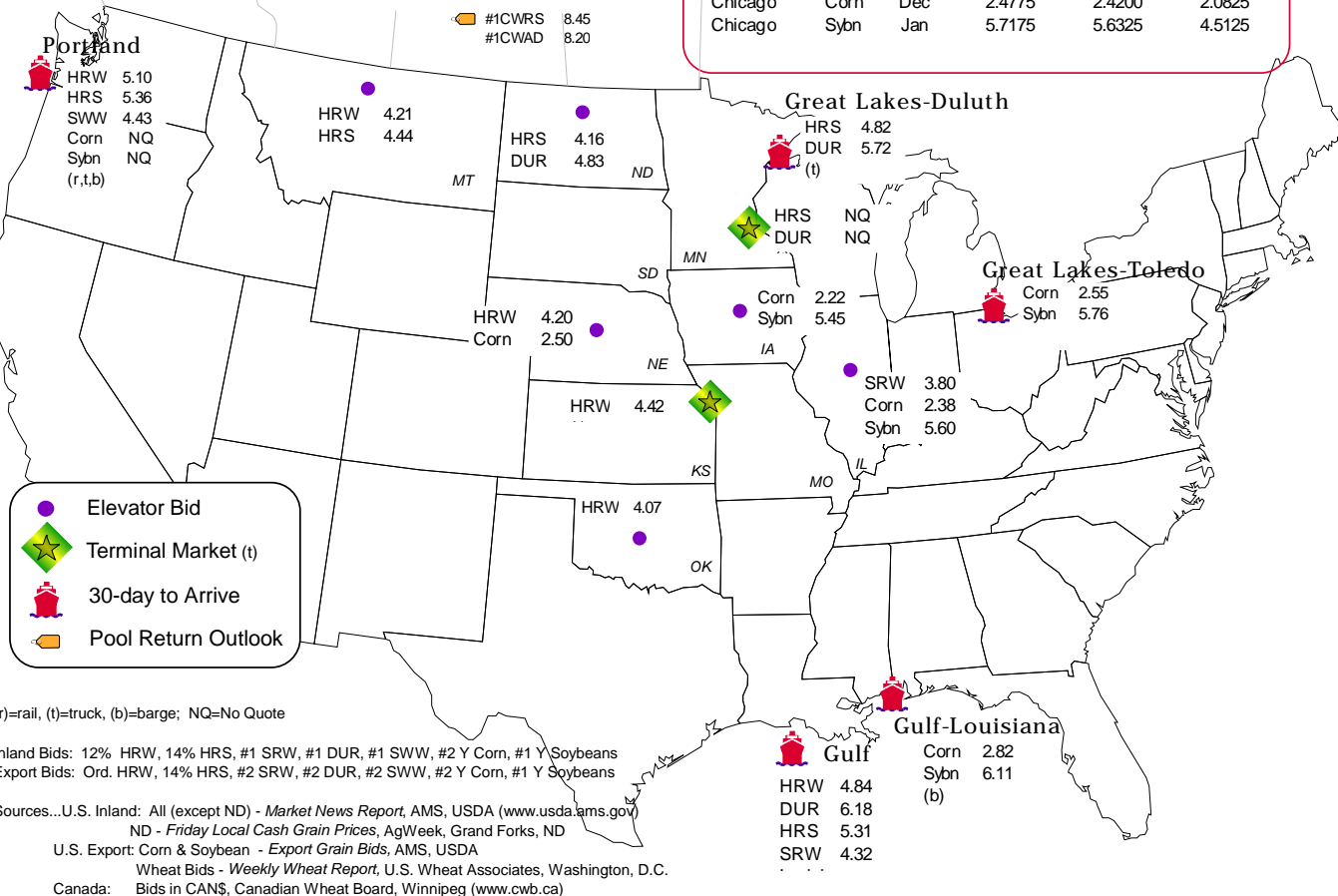
Per Bushel

Commodity	Origin--Destination	This week	Last week
Corn	IL -- Gulf	-0.44	-0.43
Corn	NE -- Gulf	-0.32	-0.31
Soybean	IA -- Gulf	-0.66	-0.67
HRW	KS -- Gulf	-0.42	-0.40
HRS	ND -- Portland	-1.20	-1.12

The **Grain Bid Summary** illustrates the market relationships for corn, soybeans, and five varieties of wheat among selected origins and destinations. Positive and negative adjustments in the differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

**Grain Bid Summary**

Futures:			11/22/2002	Week Ago 11/15/2002	Year Ago 11/23/2001
Kansas City	Wht	Dec	4.2425	4.3250	2.8950
Minneapolis	Wht	Dec	4.3100	4.4675	3.0400
Minneapolis	Dur	Dec	5.7000	5.7000	n.a.
Chicago	Wht	Dec	3.7375	3.8975	2.8900
Chicago	Corn	Dec	2.4775	2.4200	2.0825
Chicago	Sybn	Jan	5.7175	5.6325	4.5125



## RAIL TRANSPORTATION

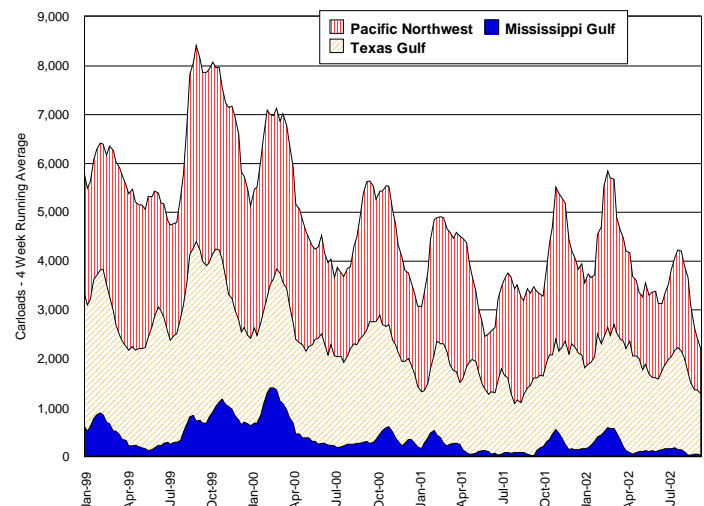
### Rail Deliveries to Port

Carloads

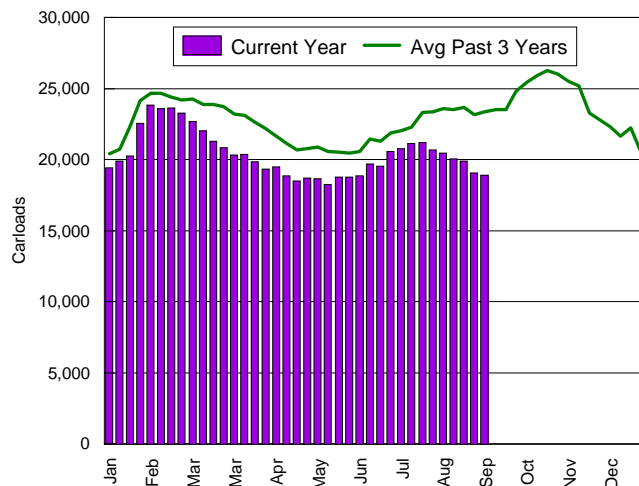
	Mississippi Gulf*	Texas Gulf	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
11/13/02	114	1,567	3,864	504	6,049
11/20/02	35	1,894	3,685	99	5,713
YTD 2002	9,821	78,719	99,130	18,938	206,608
YTD 2001	9,388	72,424	102,236	23,728	207,776
% YTD 2001	105%	109%	97%	80%	99%
Total 2001	10,022	81,804	111,376	26,604	229,806
Total 2000	25,767	104,473	128,414	14,816	273,470

Source: Transportation &amp; Marketing/AMS/USDA; (\*) Incomplete Data

### Rail Deliveries to Port



### Grain Car Loadings for Class I Railroads



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

### Class I Rail Carrier Grain Car Bulletin

Grain Carloads Originated and Grain Service Index

	East		West			U.S. Total	Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
11/23/02	3,570	3,399	8,611	692	7,665	23,937	3,566	5,135
This Week Last Year	2,341	2,902	7,057	480	5,460	18,240	4,577	4,880
2002 YTD	130,074	149,149	360,608	24,405	311,357	975,593	177,928	180,809
2001 YTD	138,302	147,939	389,393	23,242	314,842	1,013,718	230,294	212,471
% of Last Year	94%	101%	93%	105%	99%	96%	77%	85%
2001 Total	151,864	163,018	428,603	26,330	347,156	1,116,971	254,982	232,461

### U.S. Rail Carrier Grain Service Index\*

Dec-01	95.5	93.1	100.9	101.0	98.0	97.5
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Source: Association of American Railroads; \*Base Year =2001, Index based on Number of Covered Hopper Cars Online for Rail Carrier

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

**Railroad Car 'Auction' Results**

Average Premium/Discount to Tariff, \$/Car - Last Auction

Delivery for:	Jan-03	Feb-03	Mar-03
COT/N. Grain	\$0	\$0	no bid
COT/S. Grain	\$0	\$0	\$0
GCAS/Region 1	\$1	\$0	no offer
GCAS/Region 2	\$7	\$2	no offer

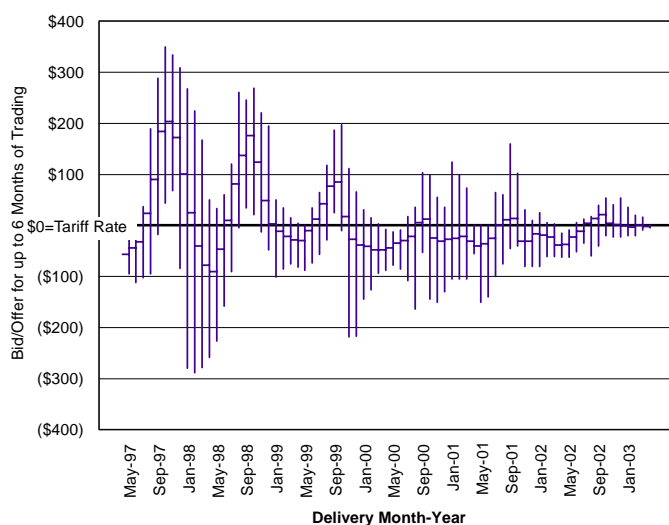
Source: Transportation &amp; Marketing/AMS/USDA.

(COT=Certificate of Transportation; GCAS=Grain Car Allocation System)

**Secondary Rail Car Market**

Average Premium/Discount to Tariff, \$/Car - Last Week

	Delivery Period			
	Dec-02	Jan-03	Feb-03	Mar-03
BNSF-GF	\$28	\$4	\$(1)	\$(2)
UP-Pool	\$96	\$25	\$14	\$12

**Secondary Rail Market Bid****Tariff Rail Rates for Unit Train Shipments**

November 2002

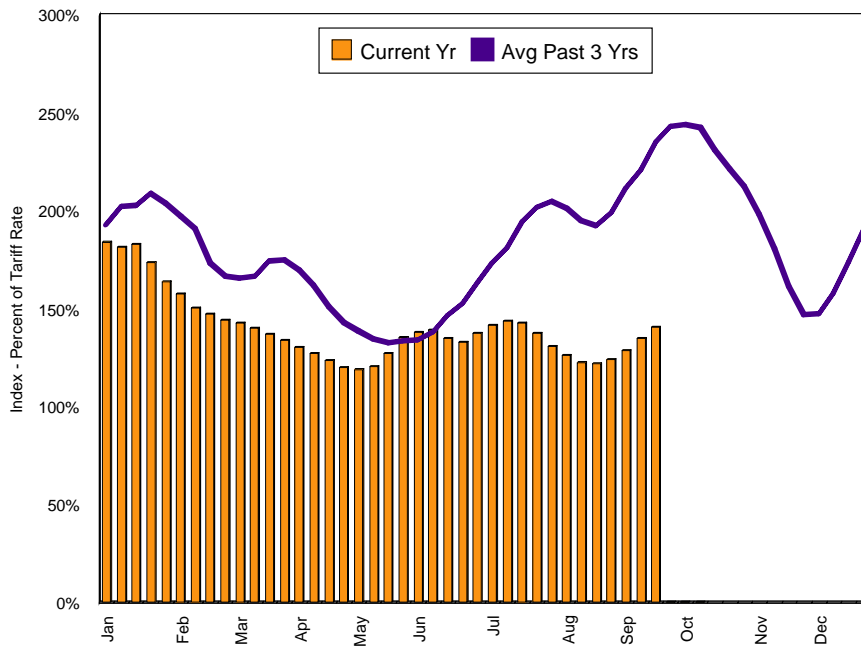
Date Effective	Tariff Item	Commodity	Origin	Destination	Rate Per Car	Rate Per MT	Rate/Per Bushel*
11/04/02	45560	Wheat	Minneapolis, MN	Houston, TX	\$2,050	\$22.60	\$0.62
11/04/02	43521	Wheat	Minneapolis, MN	Portland, OR	\$3,877	\$42.74	\$1.16
11/04/02	46540	Wheat	Kansas City, MO	Houston, TX	\$1,650	\$18.19	\$0.50
11/04/02	43586	Wheat	Kansas City, MO	Portland, OR	\$4,347	\$47.92	\$1.30
11/04/02	43581	Wheat	Omaha, NE	Portland, OR	\$4,005	\$44.15	\$1.20
11/04/02	31005	Corn	Minneapolis, MN	Portland, OR	\$3,050	\$33.62	\$0.85
11/04/02	31035	Corn	Kansas City, MO	Portland, OR	\$2,700	\$29.76	\$0.76
11/04/02	31005	Corn	Omaha, NE	Portland, OR	\$2,850	\$31.42	\$0.80
11/04/02	61110	Soybean	Minneapolis, MN	Portland, OR	\$3,030	\$33.40	\$0.91
11/04/02	61110	Soybean	Omaha, NE	Portland, OR	\$2,780	\$30.64	\$0.83

Source: www.bnsf.com

Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat &amp; Soybeans 60 lbs/bu

## BARGE TRANSPORTATION

**Illinois River Barge Rate Index - Rate Quotes**



The **Illinois River Barge Rate Index** averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The **Index**, along with **Rate Quotes** and **Futures Market** bids are indicators of grain transport supply and demand.

Calculating barge rate per ton:  
 $\text{Index} \times 1976 \text{ Tariff Benchmark Rate per Ton}$

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

### BARGE RATE QUOTES: Southbound Barge Freight

Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

	11/27/02	11/20/02	Dec. '02	Feb. '03
Twin Cities	nq	297	nq	nq
Mid-Mississippi	258	233	nq	nq
Illinois River	241	214	188	174
St. Louis	215	190	139	130
Lower Ohio	167	167	143	133
Cairo-Memphis	172	168	142	123

Source: Transportation & Marketing /AMS/USDA; nq=no quote

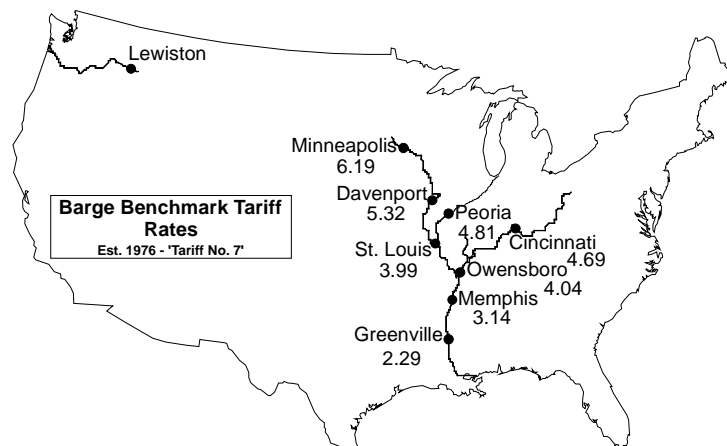
### BARGE FUTURES MARKET

#### Southbound Barge Freight Nominal/Cash Basis Values

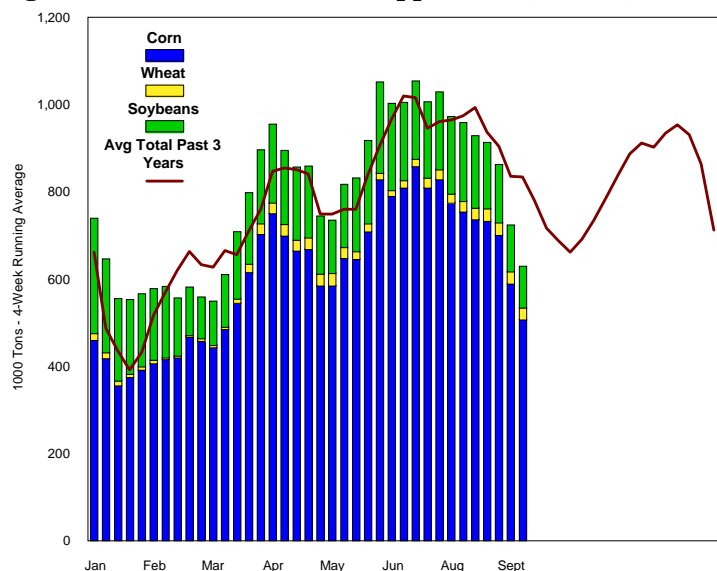
Index=Percent of Tariff, Based on 1976 Tariff Benchmark Rate

Week ended	River/Region	Contract Period	Rate	
			Futures	Cash
12/03/02	St. Louis	Oct	n/a	n/a
		Dec	n/a	173
		Feb	n/a	140
		Apr	n/a	140
		Jun	n/a	140
		Oct	n/a	n/a
	Illinois River	Dec	n/a	210
		Feb	n/a	180
		Apr	n/a	148
		Jun	n/a	150

Source: St. Louis Merchants Exchange



## Barge Movements on the Mississippi River (Lock 27)



## Barge Grain Movements

for week ending 11/23/02

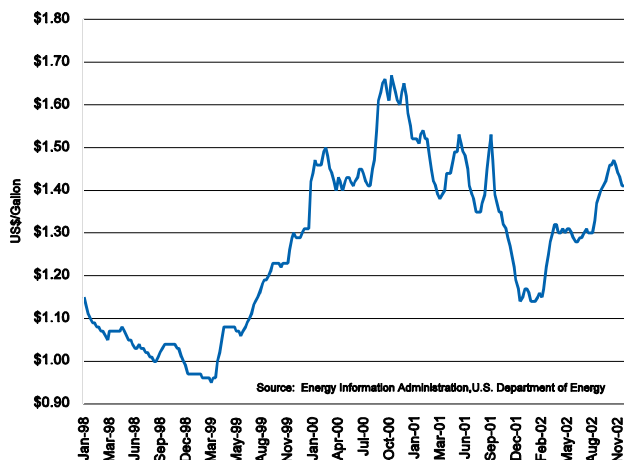
	Corn	Wht	Sybn	Total
	1,000 Tons			
Mississippi River				
Rock Island, IL (L15)	535	4	90	636
Winfield, MO (L25)	789	8	198	998
Alton, IL (L26)	1,077	11	274	1,365
Granite City, IL (L27)	1,088	11	289	1,391
Illinois River (L8)	276	3	79	359
Ohio River (L52)	14	6	55	83
Arkansas River (L1)	n/a	n/a	n/a	n/a
2002 YTD	31,321	2,348	10,247	45,317
2001 YTD	28,517	2,502	8,630	41,410
% of 2001 YTD	110%	94%	119%	109%
Total 2001	31,878	2,679	10,616	47,091

YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

Source: U.S. Army Corp of Engineers.

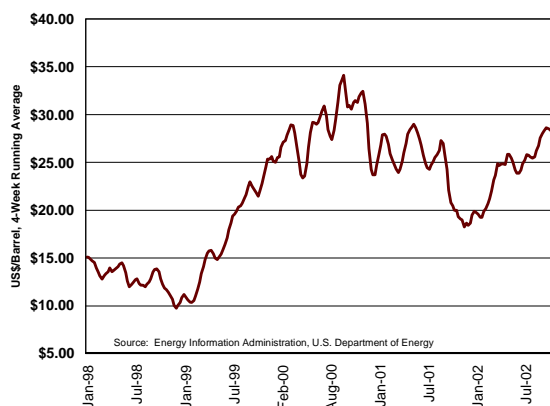
## TRUCK TRANSPORTATION

## Weekly U.S. Retail Road Diesel Price



The weekly **Diesel Price** provides a proxy for trends in U.S. truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

## Weekly Brent Crude Price, Friday Close



## Crude Oil Prices

US\$ per Barrel	This Week	Last Week	
Light Sweet Crude (NYMEX)	26.94	26.14	▲
Brent Crude	25.85	24.65	▲

Source: [www.eia.doe.gov](http://www.eia.doe.gov); \*U.S. Refiner Crude Acquisition Cost, Composite Domestic & Import

Note: Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London

<b>GRAIN EXPORTS</b>
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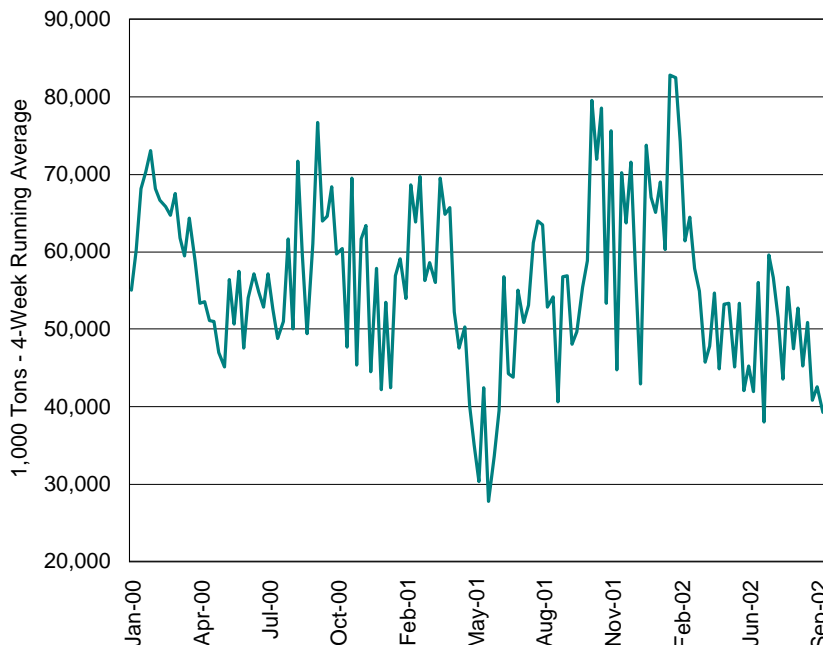
**U.S. Export Balances** (1,000 Metric Tons)

	<i>HRW</i>	<i>SRW</i>	Wheat		<i>DUR</i>	<i>All</i>	Corn	Soybean	Total
			<i>HRS</i>	<i>SWW</i>					
<u>Unshipped Export Balances</u>									
11/21/02	1,286	792	1,557	852	162	4,648	8,573	7,680	20,901
This Week Year Ago	1,334	695	1,068	542	231	3,870	6,603	8,608	19,081
<u>Cumulative Exports-Crop Year</u>									
01/02 YTD	4,074	1,317	3,476	1,733	442	11,042	8,275	7,569	26,886
00/01 YTD	3,983	2,905	2,563	1,608	621	11,680	10,131	17,713	39,524
99/00 Total	9,858	4,710	6,305	5,413	1,232	27,518	37,220	24,516	89,254
98/99 Total	7,387	3,645	7,864	6,105	963	25,965	44,476	24,501	94,942
97/98 Total	9,867	6,792	8,918	6,443	897	32,918	55,769	23,550	112,237

Source: Foreign Agricultural Service YTD-Year-to-Date ([www.fas.usda.gov](http://www.fas.usda.gov)) Crop Year:Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31**Select U.S. Port Regions - Grain Inspections for Export - 1,000 Metric Tons**

	<u>Pacific Region</u>			<u>Mississippi Gulf</u>			<u>Texas Gulf</u>			<u>Port Region Total</u>		
	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Wheat</i>	<i>Corn</i>	<i>Soybn</i>	<i>Pacific</i>	<i>Mississippi</i>	<i>Texas</i>
11/28/02	220	76	141	124	708	490	163	0	0	437	1,322	163
2002 YTD	8,191	3,549	2,683	5,116	33,418	15,927	5,442	261	992	14,423	54,461	6,695
2001 YTD	8,893	4,774	2,618	5,736	31,885	14,851	5,377	257	1,391	16,284	52,473	7,025
% of 2001 YTD	92%	74%	102%	89%	105%	107%	101%	102%	71%	89%	104%	95%
2001 Total	10,007	5,877	1,647	6,829	34,991	17,996	6,984	470	1,008	17,530	59,816	8,462

Source: Federal Grain Inspection Service YTD-Year-to-Date

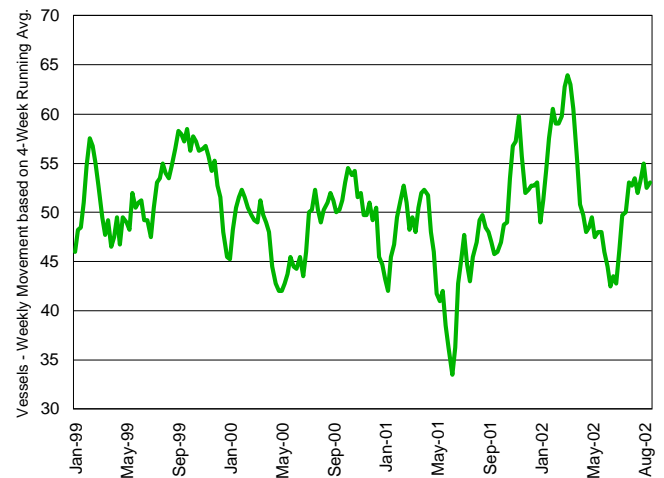
**U.S. Grain Inspected for Export****Select Canadian Port Export Inspections**  
1,000 Metric Tons, Week End Summary

	<u>Wheat</u>	<u>Durum</u>	<u>Barley</u>
11/28/02			
Vancouver			
Prince Rupert	89	15	
Prairie Direct	4	10	9
Thunder Bay	4	21	1
St. Lawrence	1,849	1,015	134
2001/02 YTD	4,621	935	343
2002/03 YTD	1,946	1,061	144
% of Last Year	237%	88%	238%

Source: Canadian Grains Commission, Crop Year 8/1- 7/31



### Gulf Port Region Grain Vessel Loading Past 7 Days

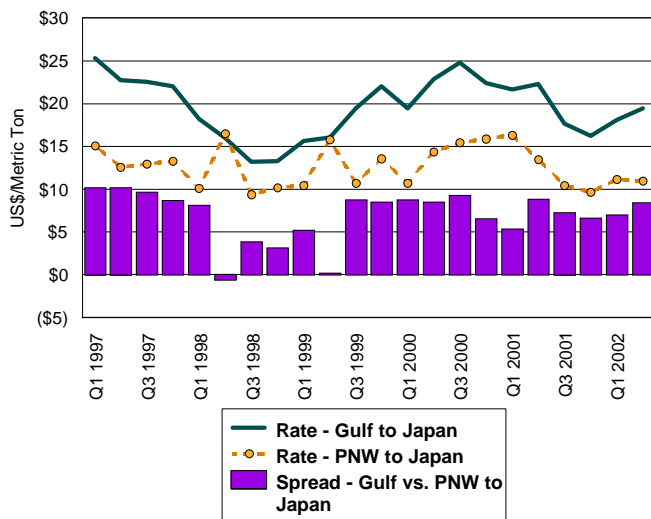


### Port Region Ocean Grain Vessels

	Gulf			Pacific Northwest	Vancouver B.C.
	In Port	Loaded 7-Days	Due Next 10-Days	In Port	In Port
11/21/02	40	55	67	10	6
11/28/02	39	55	54	9	2
2001 Range	(13..65)	(28..64)	(46..81)	(1..18)	(4..20)
2001 Avg	36	48	63	9	12

Source: Transportation &amp; Marketing /AMS/ USDA

### Grain Vessel Rates to Japan



### Quarterly Ocean Freight Rates

Average Rates &amp; Percentage Changes, U.S. Dollars/Metric Ton

	2002 3 <sup>rd</sup> Qtr	2001 3 <sup>rd</sup> Qtr	% Change		2002 3 <sup>rd</sup> Qtr	2001 3 <sup>rd</sup> Qtr	% Change
<b>Gulf to</b>				<b>Pacific NW to</b>			
Japan	\$19.54	\$17.69	9%	Japan	\$11.57	\$11.46	10%
Mexico	\$7.14	-	-				
Venezuela	-	\$13.45	-				
N. Europe	-	\$12.06	-				
N. Africa	\$31.64	\$18.21	42%	<b>Argentina to</b>			
Med. Sea	\$11.92	\$12.05	-1%	Med. Sea	\$19.93	-	-
Black Sea	-	-	-	N. Europe	-	\$16.22	-
				Japan	-	\$29.40	-

Source: Transportation &amp; Marketing/AMS/USDA; (\*) rates shown are for metric ton (2,204.62 lbs.=one metric ton)

### Ocean Freight Rates for Selected Shipments - week ending 11/30/02

Export Region	Import Region	Grain	Month	Volume Loaded (Tons)	Freight Rate (\$/Ton)
U.S. Gulf	Guayaquil, Ecuador	Corn	Nov 25/Dec 2	25,000	\$23.00
U.S. Gulf	Ireland	Grains	Nov 28/Dec 5	30,000	\$17.20
U.S. Gulf	Japan	Heavy Grain	Dec 10/15	54,000	\$24.25
U.S. Gulf	Japan	Heavy Grain	Dec 15/29	54,000	\$24.25
U.S. Gulf	Japan	Heavy Grain	Dec 28/Jan 5	54,000	\$24.25

Source: Maritime Research Inc.; rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

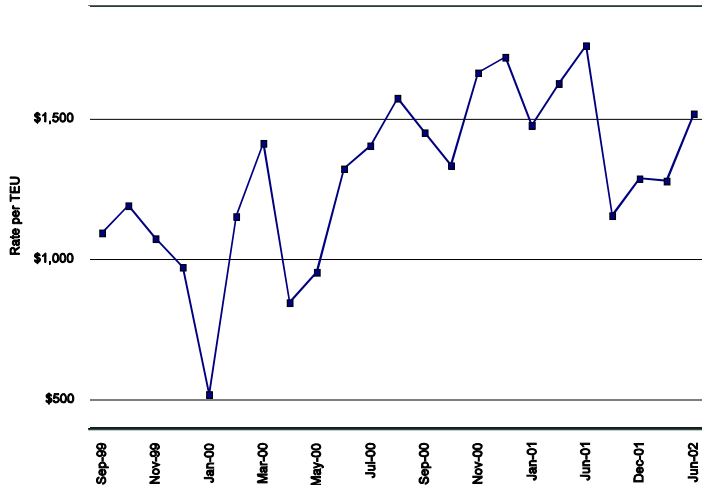
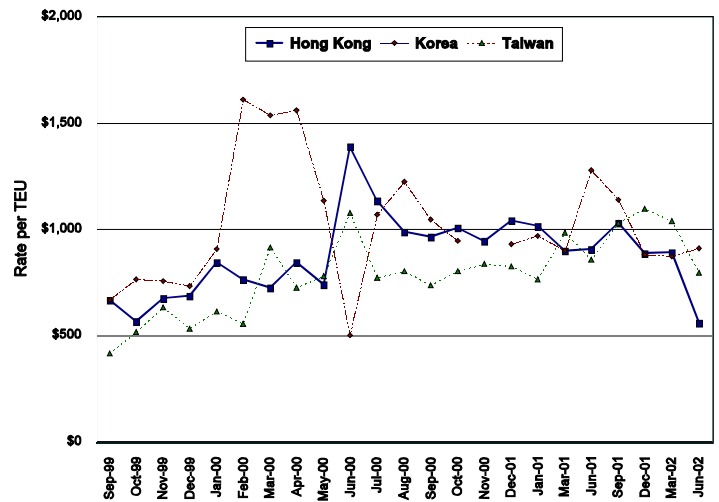


CONTAINER

**Container Ocean Freight Rates**

Monthly Weighted Averages Based on Shipping Line Monthly Mkt. Share

Source: Transportation &amp; Marketing/AMS/USDA

**Container Rates - Soybeans**  
Seattle, WA Origin to Tokyo, Japan**Container Rates - Feed Grain**  
Seattle, WA Origin to Selected Destinations

Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.